94145E-02
2012-05

Constant pressure regulator SP430

E Installation instructions



This guide is a supplement to the manual for OJ Electronics PRH. Both instructions must be read before installation.

Pressure regulation SP430

General

The pressure control should be connected to the duct where you want to regulate or measure the pressure.

Desired pressure (set.point) is set on the pressure regulator. Min and max settings are also set on the pressure regulator. If preferences for high speed are set at different speeds, both fans will regulate with the same relative difference.

Step 1: Connecting

Use pressure regulator type OJ Electronics PRH.

Mount the pressure transducer in a suitable location, set DIP switch for the desired target area. Connect the pressure transducer and the air hose to the pressure regulator.

Step 2: Connecting to the the system board

Stop the unit and connect the 0-10V signal from the pressure regulator to the unit (see wiring diagram to the unit).

Set pot.meter TH2 and AH2 of the unit at 100%.

Applies only to L50: Add jumper between X 1 and X 2 (due to feedback) on the terminals, see also wiring diagram,

For different amounts of air supply and exhaust, see step 4.

Applies only for SP400: On the circuit board to the unit connects the engine with the highest air level to terminal No. 19

The cable is connected from terminal 19 to either terminal 40 or No. 41 Terminal No. 40 is input 0-10V signal to the exhaust motor. Terminal No. 41 is input 0-10V signal to the supply air. If both are both equally (eg 100%) insert the wire into the terminal block No. 41

Step 3: Programming the pressure regulator

Regulation without compensation

An overview of the menus are in the guidance for the regulator. Use this to find the right menu under each of the points below. Turn the rotary / push button to scroll through menus and press to activate and set the desired values.

1. Go to **Edit Settings** and enter the code **1234** to start programming.
2. Rotate the encoder until you get to the **Motor, signal Min** page. This is set to the value of pot.meter TH1 on the unit. If this is set to eg 40%, it shall be set at 40% in the regulator. If a lower limit is not desirable it should be set to 60% in the regulator.
3. Rotate the encoder until you get to the **Motor, signal Max** page. This is set to the value of pot.meter TH2 on the unit. If this is set to eg 80%, it shall be set at 80% in the regulator. If an upper limit is not desirable it should be set to 100%.
4. Rotate the encoder until you get to the **Setpoint day** page. Set this to the pressure (Pa) you want in the duct.

Step 4: Different amounts of air inlet / exhaust

Start the unit. Both TH2 and AH2 of the unit will still be at maximum (100%).

Applies only to L50: If AH2 is set higher than TH2, the cable between the X: 1 on the main terminal and S: 41 on the circuit board must be moved to S: 40 on the circuit board.

Wait until the unit has found a stable operating point, then gradually reduce the flow by lowering the air flow (TH2 or AH2) until you have the required level.